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MEMORANDUM

To: Transportation Committee

From: CMAP staff

Date: January 2017

Re: Congestion Reduction Indicator Refinement

GO TO 2040 includes goals to prevent an increase in congestion even with growth in population and employment. This exploratory study, included in the FY17 CMAP work plan, will evaluate more specifically what would have to occur to reach that goal, including operations and management strategies, traffic flow improvements, pricing, etc. The study parallels the transit ridership growth study drafted in FY 16. The results will be used to inform the selection of recommended strategies and the process of setting targets for congestion reduction in the region in ON TO 2050. The product is a report due in summer 2017. Staff is seeking feedback from the Transportation Committee on the direction and the details of the study.

This study will use a combination of analytical techniques to yield planning-level estimates of the relative impacts of potential congestion reduction strategies, including CMAP's travel demand model as well as operations-focused sketch tools such as TOPS-BC and a model from the Strategic Highway Research Program 2 meant to evaluate treatments for non-recurring congestion. As in the transit ridership growth study, strategies will be compared by developing "low" and "high" scenarios, where the strategy is applied to a minimal extent and to a higher extent (for instance, by intensity, geography, or duration). The low and high results can be used to develop a range of potential impacts.

While the GO TO 2040 indicator was congested hours of operation -- the number of hours each day that congestion occurs -- on the limited access highway system, a number of other measures will also be collected for each of the tested strategies. Since this study may offer insight into which strategies would best help meet system performance targets in draft regulations required under the Moving Ahead for Progress in the 21st Century (MAP-21) federal transportation bill, highway measures will be calculated to also approximate those proposed measures and reported separately for Interstates and non-Interstate National Highway System (NHS).

There is a very wide range of potential strategies to consider. Operations-focused strategies will include reducing incident clearance time, crash reduction, signal improvements, and various active traffic management techniques, among others. Capacity improvements might focus on intersection design, while policy changes would concentrate on land use, particularly household and job location, along with pricing. One key outcome of the study is to develop a "layer" of recommended corridors on which certain operations strategies could be implemented, which would be part of the overall place-based approach to developing subregional recommendations for ON TO 2050.

Action requested: Discussion

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